THE LANCET Infectious Diseases

## Supplementary webappendix

This webappendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Simpson CR, Thomas BD, Challen K, et al. The UK hibernated pandemic influenza research portfolio: triggered for COVID-19. *Lancet Infect Dis* 2020; published online June 7. https://doi.org/10.1016/S1473-3099(20)30398-4.

# Appendix

## The NIHR hibernated pandemic studies collaborative group

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**Table 1 National Institute of Health Research Pandemic Preparedness Portfolio – COVID-19 pivot**

| Project | Lead Applicant and Institute | Purpose of study | Pivot to COVID-19 and status | Link |
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| Flu Telephone Survey Template study (FluTEST) | Dr James Rubin, King's College London | Survey to identify public knowledge, attitudes and behaviour. During a pandemic we will support the UK Department of Health and Social Care in deploying these items and interpreting the results. | The first study to be activated. No substantial changes and findings being used to inform public health strategies. Study in progress. | https://www.ncbi.nlm.nih.gov/books/NBK263566 |
| Early estimation of pandemic influenza Antiviral and Vaccine Effectiveness (EAVE): use of a unique community and laboratory national linked dataset | Professor Colin Simpson, The University of Edinburgh | Sentinel system linking primary care data to RT-PCR swabs, serology and hospital and mortality outcome data. Rapid evaluation of vaccination, antivirals and therapies. Intelligence on groups considered to be at increased risk of serious illness or death from infection. | Increase in country-wide population coverage and new datasets (EAVEII) including: A&E, ambulance, ICU and ePrescribing. COVID-19 related morbidity and therapy data added. Therapeutic effectiveness and natural history of COVID-19 to be explored. Ethical and privacy permissions granted via substantial amendment of EAVE permissions. | https://www.ncbi.nlm.nih.gov/books/NBK321438 |
| Real time refinement and validation of criteria and tools used in primary care to aid | Professor Calum Semple, University of Liverpool | FLU-CATs is a study that checks if decision tools can be used by GPs and other Health Care Professionals to help them choose who can be cared for safely in the | Adapted to gather data from possible COVID-19 cases. Gathering data from telephone consultations. Study underway. | https://www.nottingham.ac.uk/research/groups/healthprotection/projects/ |

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| hospital referral decisions for patients of all ages in the event of surge during an influenza pandemic - FLU-CATs (Influenza Community Assessment Tools) | | community and who needs urgent referral to hospital. FLU-CATs runs each winter influenza season in a small number of GP practices to keep the study processes running smoothly and ready to react should there be a 'new influenza' outbreak. In the event of a 'new influenza' outbreak FLU-CATs will quickly identify which problems that patients have best predict the level of care that they need. | | flu-cats.aspx |
| International Severe Acute Respiratory and emerging Infection Consortium (ISARIC) WHO Clinical Characterisation Protocol for emerging infections UK (CCP-UK) | Professor Calum Semple, University of Liverpool | Provides an ethically approved framework for enrolling patients to a clinical study which offers new insights into this emerging global threat. It facilitates the collection of standardised clinical data and samples on patients hospitalised with suspected or confirmed infection with COVID-19. This informs the outbreak response and patient care. COVID-19 patients now identified in the UK, the UK health research community is well-prepared to advance our understanding of this disease. | Over 4000 COVID-19 cases recruited (as of 31/03/2020). Data and samples are being distributed. Reporting automated analysis in real-time to Scientific Pandemic Influenza Modelling group (SPI-M), the New Emerging Respiratory Virus Threats Advisory Group (NERVTAG) and Scientific Advisory Group for Emergencies (SAGE) | |
| PAndemic INfluenza Triage in the Emergency Department (The PAINTED study) | Professor Steve Goodacre, University of Sheffield | PAINTED aims to identify the most accurate triage method for predicting severe illness among patients attending the emergency department with suspected pandemic influenza. | Changed to PRIEST (Pandemic Respiratory Infection Emergency System Triage) to include all pandemic respiratory infections and include ambulance services. | https://www.sheffield.ac.uk/scharr/sections/hsr/cure/priestpages/priest |

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| Maternal and perinatal outcomes of pandemic influenza in pregnancy (UK Obstetric Surveillance System, UKOSS) | Professor Marian Knight, University of Oxford | The UKOSS influenza in pregnancy study will use an existing research platform to collect information on pregnant and postpartum women admitted to hospital with confirmed influenza infection. The management of women will be described, focussing particularly on the role of extracorporeal membrane oxygenation (ECMO), and women will be followed up to pregnancy completion in order to collect information on both maternal and perinatal outcomes. | Collecting information on pregnant women admitted to hospital with Sars-CoV-2 infection. Cases notified from 01/03/2020 – over 900 notified to 05/05/2020. | https://www.npeu.ox.ac.uk/ukoss/current-surveillance/covid-19-in-pregnancy |
| Multi-centre Adjuvant Steroids in Adults with Pandemic Influenza (ASAP) Trial | Professor Wei Shen Lim, Nottingham University Hospitals | The ASAP trial is a multicentre (>40 sites) blinded randomised controlled clinical trial to determine if low dose corticosteroids (dexamethasone 6mg started within 24 hours of admission once a day for 5 days), in addition to standard care, is associated with a lower risk of death or admission to intensive care, compared to placebo. | The ASAP trial has become an arm of the RECOVERY Trial. As of 6 May 2020, 9121 participants have been randomised from 173 active participating sites. | https://asaptrial.org/<br><br>www.recoverytrial.net |

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| Real-time Modelling of a Pandemic Influenza Outbreak (RTM) | Professor Daniela De Angelis University of Cambridge | The real time model (RTM) project advances real time pandemic modelling by developing an existing model used to reconstruct the 2009 H1N1 pandemic on the basis of realistic epidemic surveillance data collected. A monitoring tool that allows to: capture spatial variation in influenza transmission; uses efficient computational algorithms for the provision of timely statistical estimates and predictions; and incorporates the above into freely available software. The tool is used by Public Health England, and key staff has been trained in its use, supported by collaborators at the University of Cambridge to deal with workforce shortage during a pandemic. The real time model has been tested in the monitoring of the 2017/2018 seasonal influenza and ready to be used in the current season to estimate infection and clinical attack rates and to predict timing and magnitude of the peak influenza activity. | Adapted to assist the Scientific Pandemic Influenza Advisory Committee (SPIM) and SAGE via simulation and estimation of epidemic evolution to predict ICU demand (National and Regional). Was activated prior to pandemic COVID-19 to create real-time models predicting the impact of seasonal influenza. | https://www.ncbi.nlm.nih.gov/books/NBK458958/pdf/Bookshelf_NBK458958.pdf |
| The population-level susceptibility, severity and spread of pandemic influenza study (PIPS) | Professor Andrew Hayward, University College London | Rapid assessment of real-time community-level susceptibility and spread of infection and illness in the event of a pandemic. Achieved this by adding additional questions and specimen collection to the Health Survey for England, an annual, nationally-representative survey that recruits participants throughout the year. | Not activated. The Health Survey for England has paused field work during the recommended period of social distancing making timely collection of specimens for serology not possible through this period. | https://www.ncbi.nlm.nih.gov/books/NBK299604/pdf/Bookshelf_NBK299604.pdf |